

Docket No. 0104-0389P

IN THE CLAIMS:

~~Please~~ cancel claims 1 through 37 without prejudice or disclaimer to the subject matter contained therein.

Please add the following new claims:

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--38. (New) A femur fixture for a hip-joint prosthesis, comprising an intraosseous anchoring structure of a generally circular cross-section for screwing laterally into a complementary bore drilled laterally into the neck of a femur after resection of the femur head to an anchored position, the intraosseous anchoring structure having a proximal end, a distal end, a relatively short frusto-conical proximal section at the proximal end, and a proximal cylindrical section having a screw thread profile thereon and extending towards the distal end from the frusto-conical proximal section, the frusto-conical proximal section and the proximal cylindrical section each being dimensioned so as to bear against the cortex of the femur neck when the intraosseous anchoring structure is in the anchored position.

39. (New) The femur fixture as claimed in claim 38, wherein the intraosseous anchoring structure is so dimensioned that its distal end projects through the lateral cortex of the femur when the intraosseous anchoring structure is in the anchored position.

Docket No. 0104-0389P

40. (New) The femur fixture as claimed in claim 38, wherein the intraosseous anchoring structure further has a distal cylindrical section having a screw thread profile thereon and extending towards the proximal cylindrical section from the distal end of the intraosseous anchoring structure, the diameter of said distal cylindrical section being less than the diameter of said proximal cylindrical section.

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41. (New) The femur fixture as claimed in claim 40, wherein the screw thread profiles of said proximal and distal cylindrical sections are essentially the same.

42. (New) The femur fixture as claimed in claim 40, wherein said intraosseous anchoring structure further comprises a tapered connecting section provided between and interconnecting said proximal and distal cylindrical sections.

43. (New) The femur fixture as claimed in claim 42, wherein said connecting section has a frusto-conical shape which at one end has a base diameter essentially equal to the diameter of said proximal cylindrical section, and at the other end has a top diameter essentially equal to the diameter of said distal cylindrical section.

Docket No. 0104-0389P

44. (New) The femur fixture as claimed in claim 42, wherein said connecting section has a flank angle in the range of 15°-45°.

45. (New) The femur fixture as claimed in claim 42, wherein said connecting section is at least partly provided with a blasted surface.

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46. (New) The femur fixture as claimed in claim 42, wherein said connecting section is at least partly provided with a circumferentially oriented roughness.

47. (New) The femur fixture as claimed in claim 46, wherein said circumferentially oriented roughness has a height less than that of the screw thread profiles of said proximal and distal cylindrical sections.

48. (New) The femur fixture as claimed in claim 46, wherein the height of said circumferentially oriented roughness is no greater than 0.3 mm.

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49. (New) The femur fixture as claimed in claim 46, wherein said connecting section is at least partly provided with a smooth surface.

Docket No. 0104-0389P

50. (New) The femur fixture as claimed in claim 42, wherein the entire surface of said connecting section is smooth.

*Amended
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51. (New) The femur fixture as claimed in claim 52, wherein one or more self-tapping cutting recesses are provided at least in part on said connecting section.

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52. (New) The femur fixture as claimed in claim 38, wherein said frusto-conical proximal section at an end thereof interfacing said proximal cylindrical section presents a diameter essentially equal to the diameter of said proximal cylindrical section.

53. (New) The femur fixture as claimed in claim 38, wherein said frusto-conical proximal section has a flank angle in the range of 8-15°.

54. (New) The femur fixture as claimed in claim 38, wherein the frusto-conical proximal section has an axial extent in the range of 5-10 mm.

55. (New) The femur fixture as claimed in claim 38, wherein the frusto-conical proximal section has a proximal diameter in the range of 18-30 mm.

Docket No. 0104-0389P

56. (New) The femur fixture as claimed in claim 38, wherein the frusto-conical proximal section is at least partly provided with a roughened surface.

57. (New) The femur fixture as claimed in claim 56, wherein said roughened surface is at least partly a blasted surface.

58. (New) The femur fixture as claimed in claim 56, wherein said roughened surface is at least partly provided with a circumferentially oriented roughness.

59. (New) The femur fixture as claimed in claim 58, wherein said circumferentially oriented roughness is in the shape of a screw thread profile.

60. (New) The femur fixture as claimed in claim 59, wherein the screw thread profile of said frusto-conical proximal section differs from the screw thread profiles of said proximal cylindrical section.

61. (New) The femur fixture as claimed in claim 60, wherein the screw thread profile of said frusto-conical proximal section has a height less than the screw thread profile of said proximal cylindrical section.

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62. (New) The femur fixture as claimed in claim 60, wherein the height of the screw thread profile on the frusto-conical proximal section is no greater than 0.3 mm.

63. (New) The femur fixture as claimed in claim 60, wherein the screw thread profile on the frusto-conical proximal section is formed by the turns of one or more screw threads.

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64. (New) The femur fixture as claimed in claim 59, wherein said circumferentially oriented roughness is in the form of circumferential beads.

65. (New) The femur fixture as claimed in claim 64, wherein said circumferential beads has a height less than that of the screw thread profile of said proximal cylindrical section.

66. (New) The femur fixture as claimed in claim 64, wherein the height of said circumferential beads is no greater than 0.3 mm.

67. (New) The femur fixture as claimed in claim 38, further comprising a head section for supporting a ball component of the hip-joint prosthesis, said head section comprising a collar section having a distal surface abutting said intraosseous anchoring structure.

Docket No. 0104-0389P

68. (New) The femur fixture as claimed in claim 67, wherein said distal surface is inclined inwardly towards the body of the collar section.

69. (New) The femur fixture as claimed in claim 68, wherein said distal surface is inclined inwardly at an inclination angle within the range of 10°-20.

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70. (New) The femur fixture as claimed in claim 67, wherein said distal surface is concave.

71. (New) The femur fixture as claimed in claim 67, wherein said distal surface is provided with radially spaced circular beads.

72. (New) The femur fixture as claimed in claim 71, wherein said circular beads have a height in the range of 0.1-0.5.

73. (New) A set of femur fixtures according to claim 38, wherein the frusto-conical proximal section and the proximal cylindrical section of each fixture in the set have different dimensions, whereby the fixture in the set having the frusto-conical proximal section and the proximal cylindrical section of correct size for abutting the cortex of the femur neck of a particular patient can be selected for use in that patient.

Docket No. 0104-0389P

74. (New) A set of femur fixtures according to claim 40, wherein the distal cylindrical sections of all fixtures in the set have the same dimension, and the frusto-conical proximal section and the proximal cylindrical section of each fixture in the set have different dimensions, whereby the fixture in the set having the frusto-conical proximal section and the proximal cylindrical section of correct size for abutting the cortex of the femur neck of a particular patient can be selected for use in that patient.--
